

<u>WIRELESS COMMUNICATION TECHNOLOGIES</u>					
COMMUNICATION NETWORK	COMMUNICATION TECHNOLOGY	PRIMARY APPLICATION	ISM BAND (GHz)	RANGE (FEET)	MAX BIT RATE (Mbps)
WWAN	GSM	Digital cellular phone service	900/1800 (MHz)	N/A	115 (Kbps)
	PCS	Digital cellular phone service	1850-1990 (MHz)	N/A	
	GPRS	Broadband access for mobile phones and computers	900/1800 (MHz)	N/A	115 (Kbps)
	EDGE	Broadband access for mobile phones and computers	900/1800 (MHz)	N/A	384 (Kbps)
	UTMS	Broadband access for mobile phones and computers	1885-2025 1980-2010 2170-2200 (MHz)	N/A	2 (Mbps)
WLAN	IEEE 802.11a	Public access to a local area network	5	75	54
	IEEE 802.11b	Public access to a local area network	2.4	150	11
	IEEE 802.11g	Public access to a local area network	2.4	150	54
	HOMERF™	Home networking	2.4	150	1.6
	OpenAir™	Public access to a local area network	2.4	500	1.6
	HiperLAN1	Public access to a local area network	5	150	24
	HiperLAN2	Public access to a local area network	5	75	54
WPAN	BLUETOOTH™	Cable replacement for wireless computing devices and peripherals	2.4	30	1-2

FIG. 1

FIG. 2

3/10

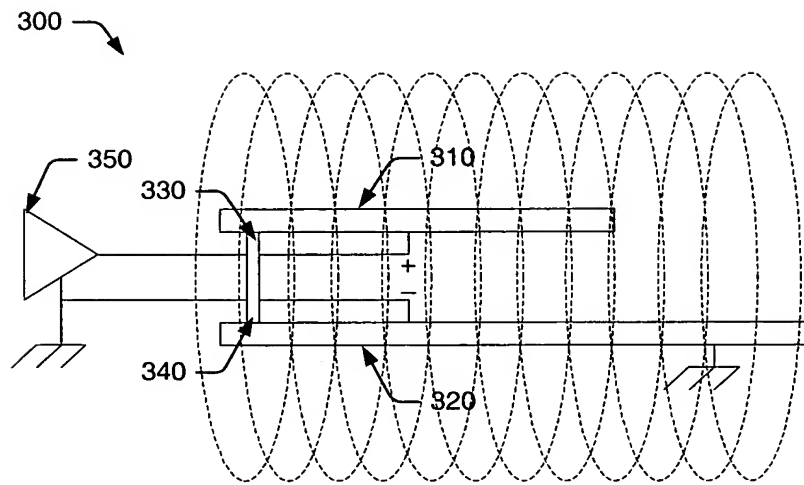


FIG. 3

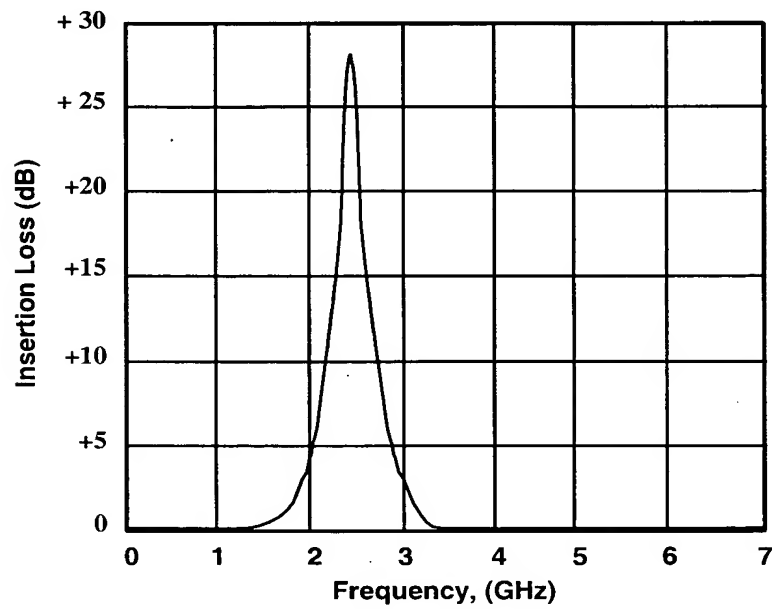


FIG. 4

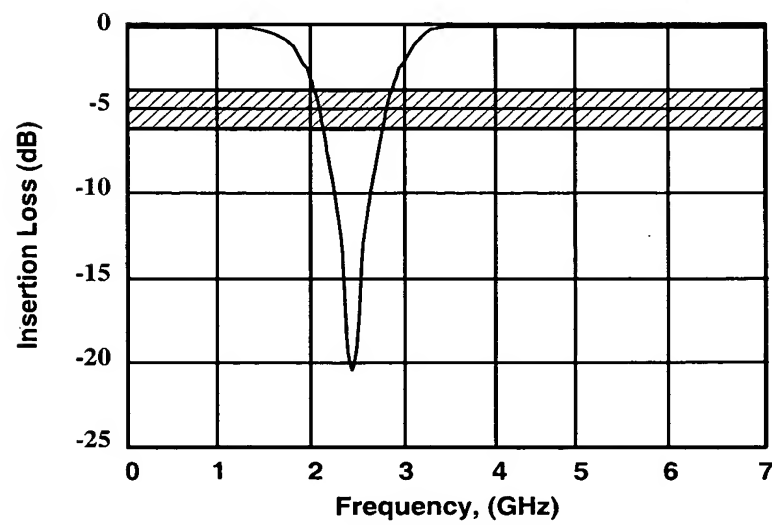


FIG. 5

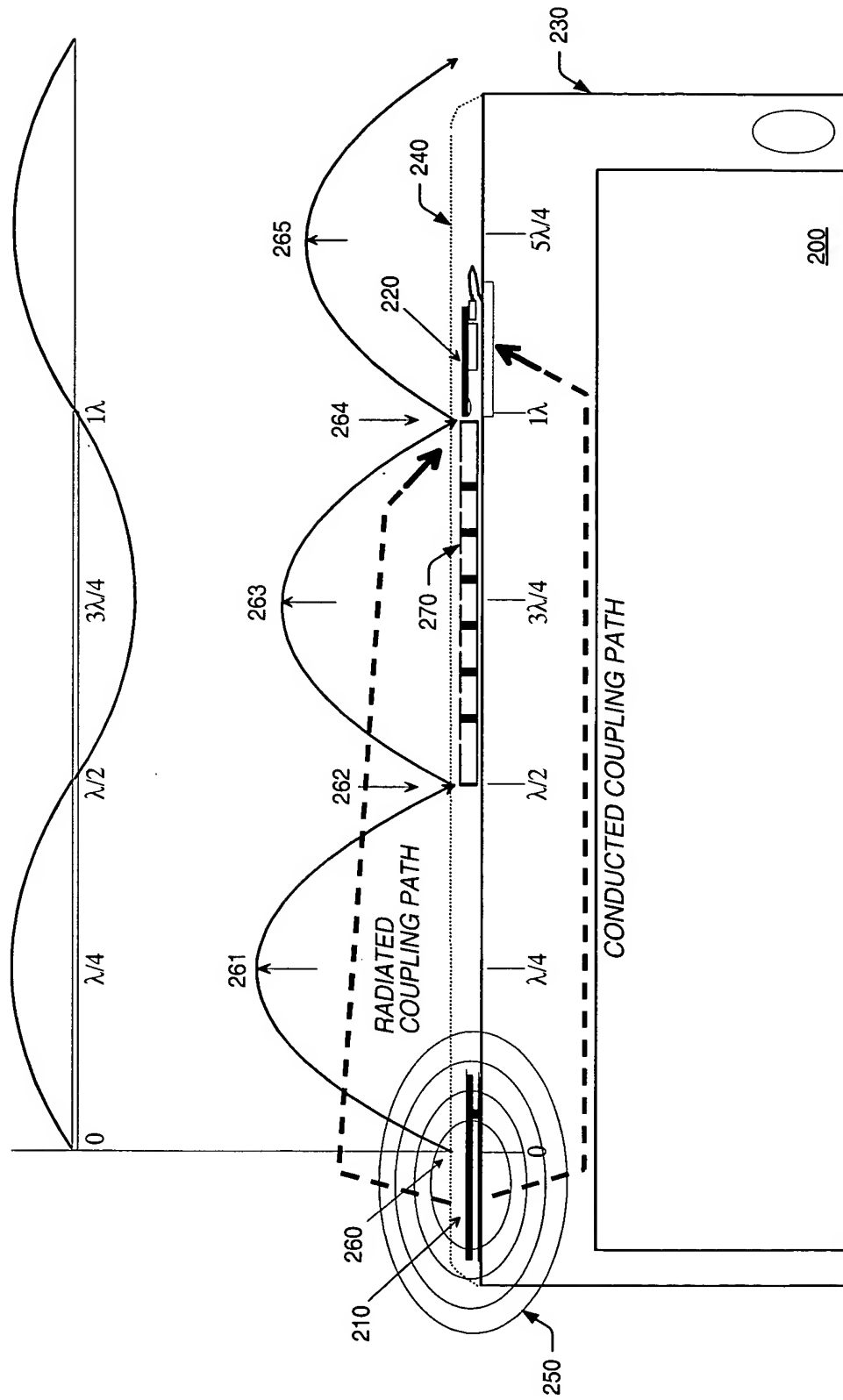


FIG. 6

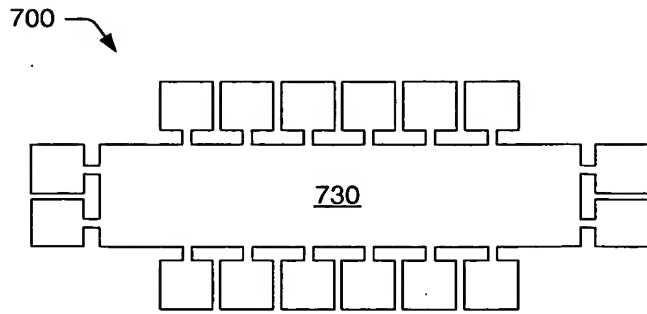


FIG. 7A
UNFOLDED PATTERN

FIG. 7B
FOLDED PATTERN

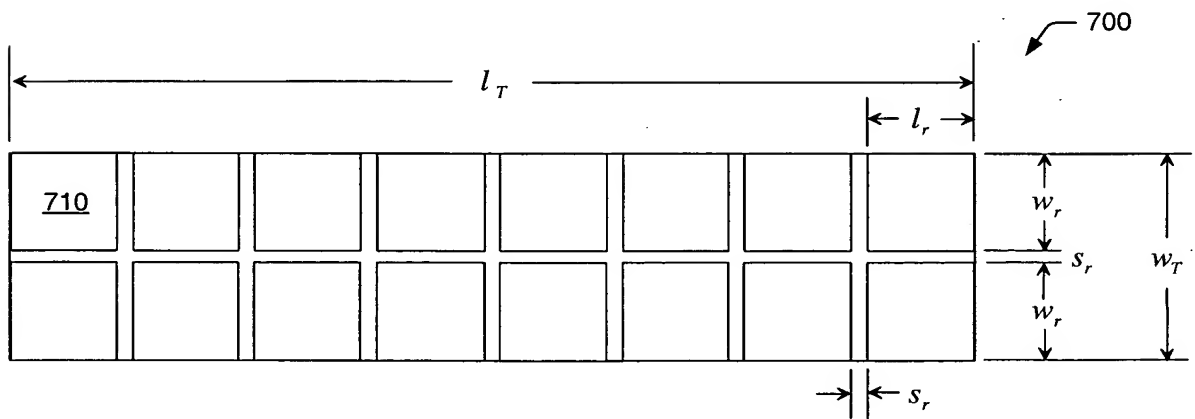
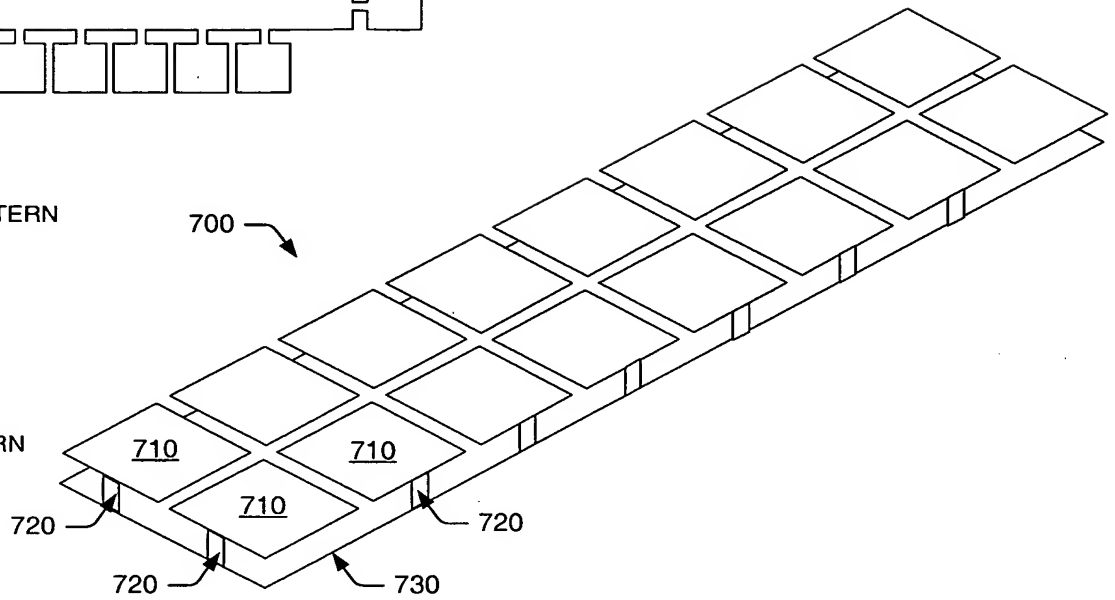


FIG. 7C

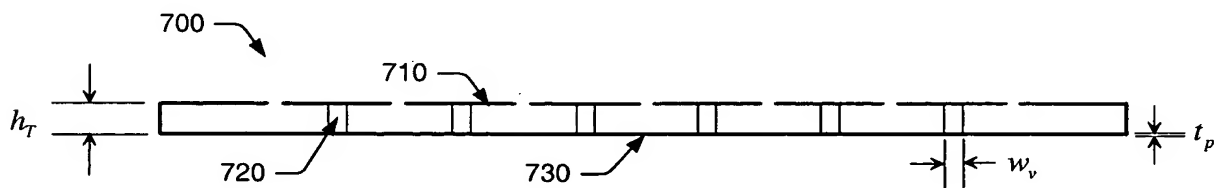


FIG. 7D

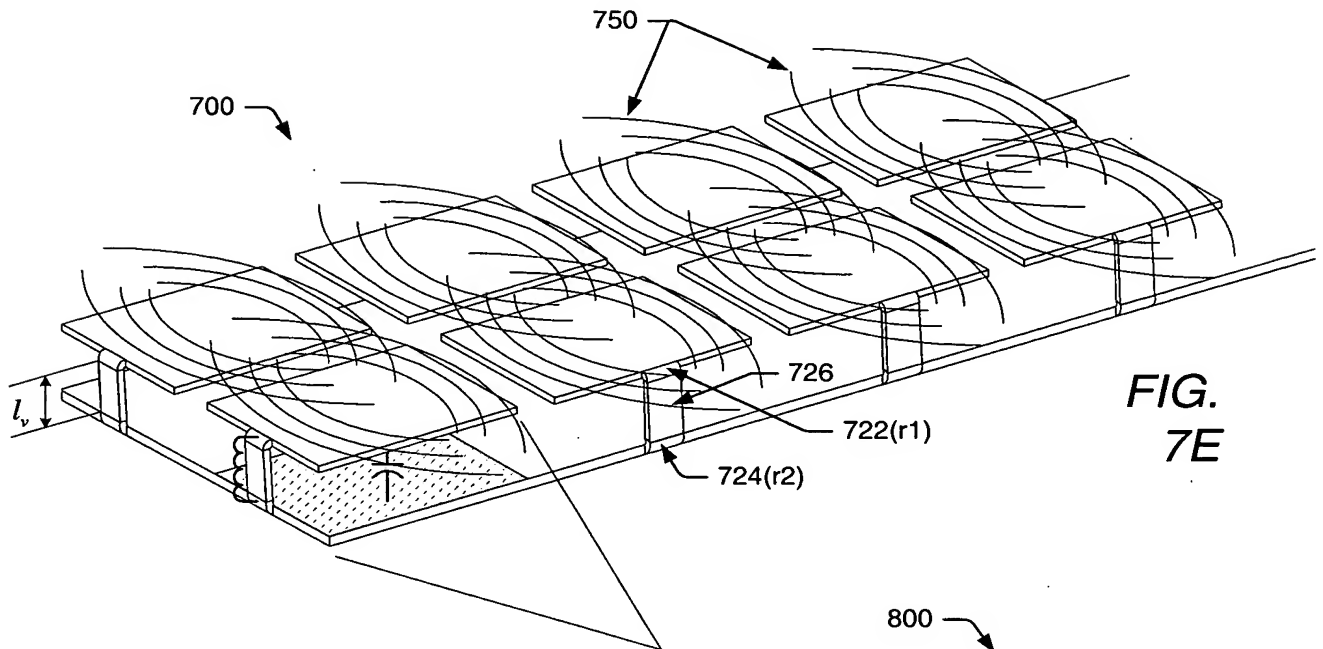


FIG. 7E

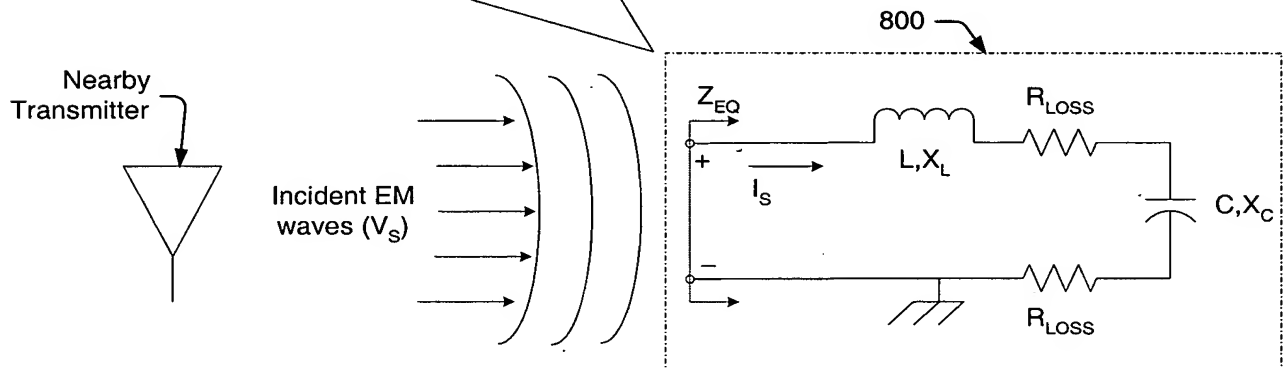


FIG. 8

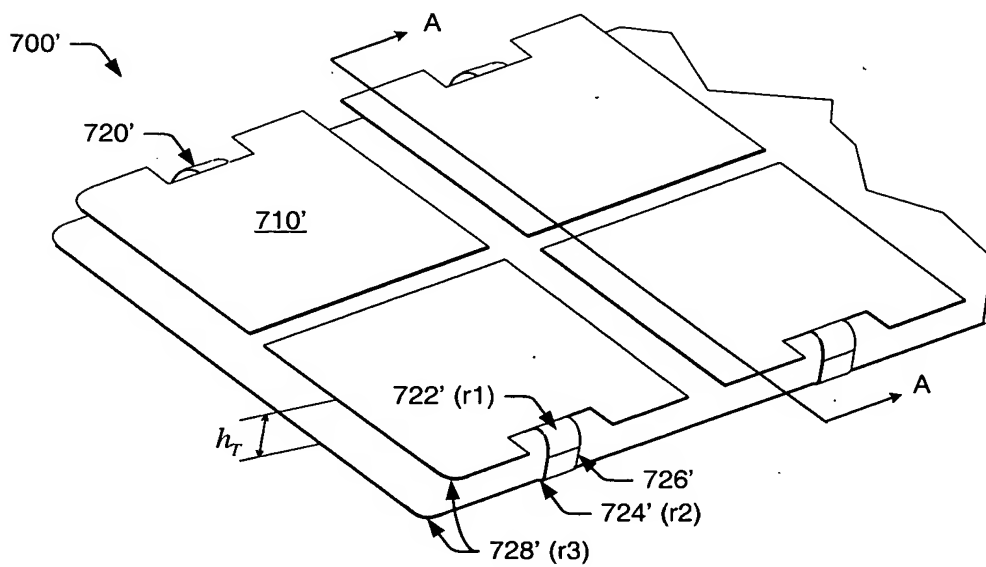


FIG. 7F

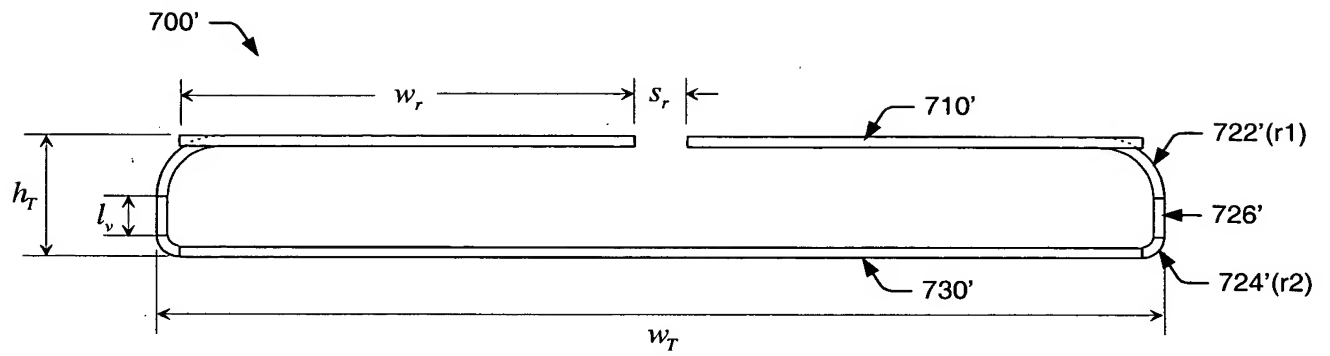


FIG. 7G

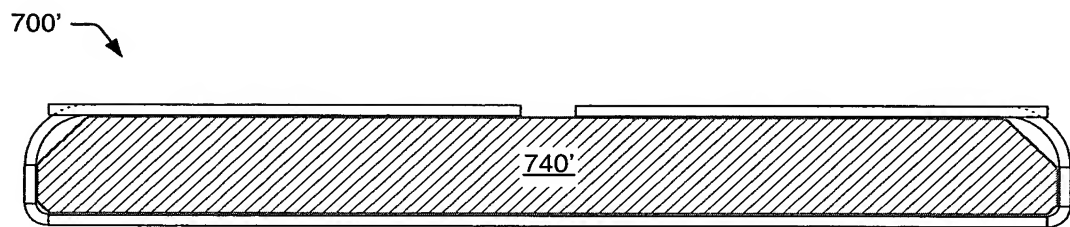


FIG. 7H

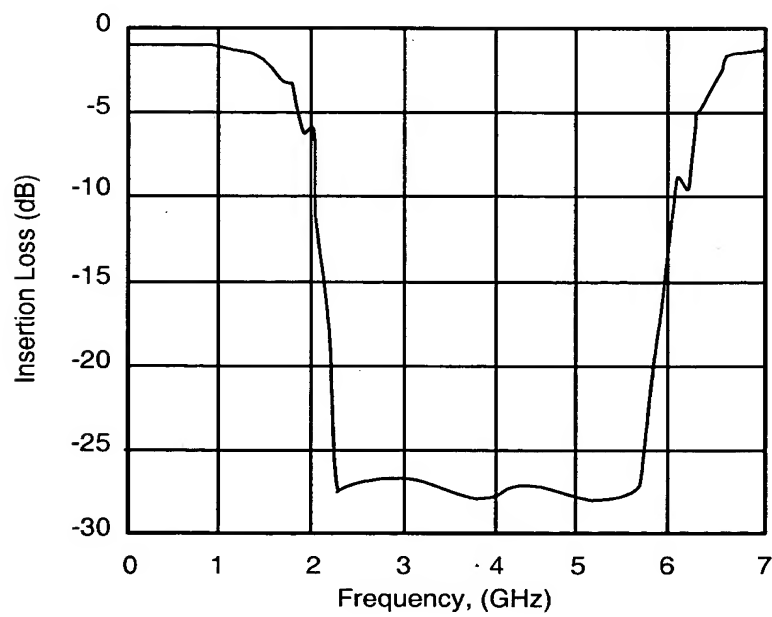


FIG. 9

1000



FIG. 10A
UNFOLDED PATTERN

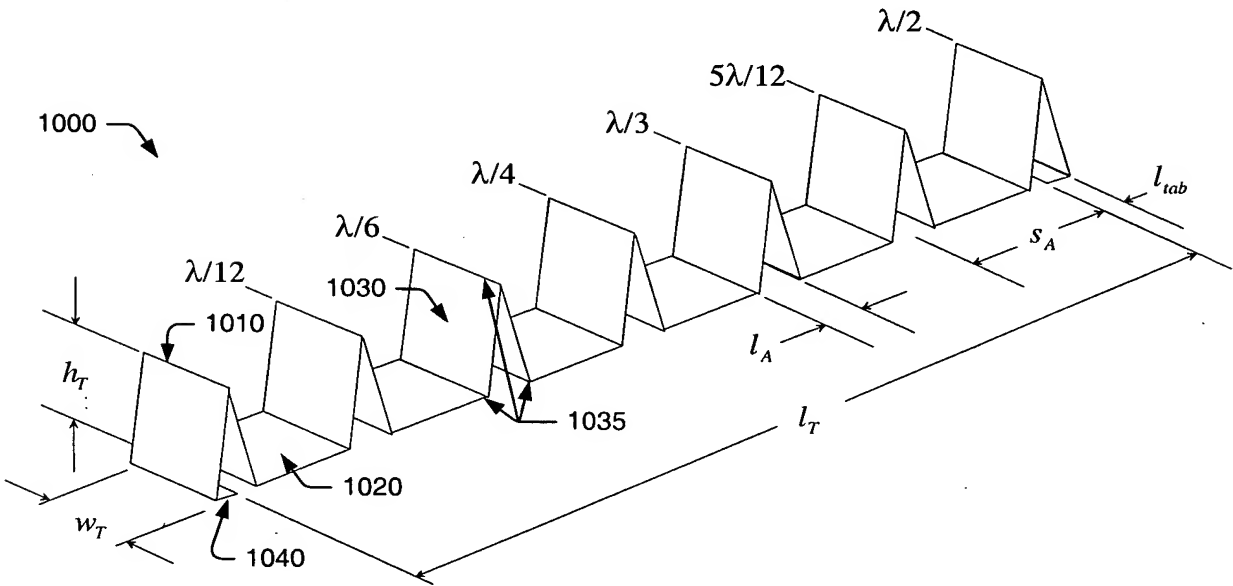


FIG. 10B
FOLDED PATTERN

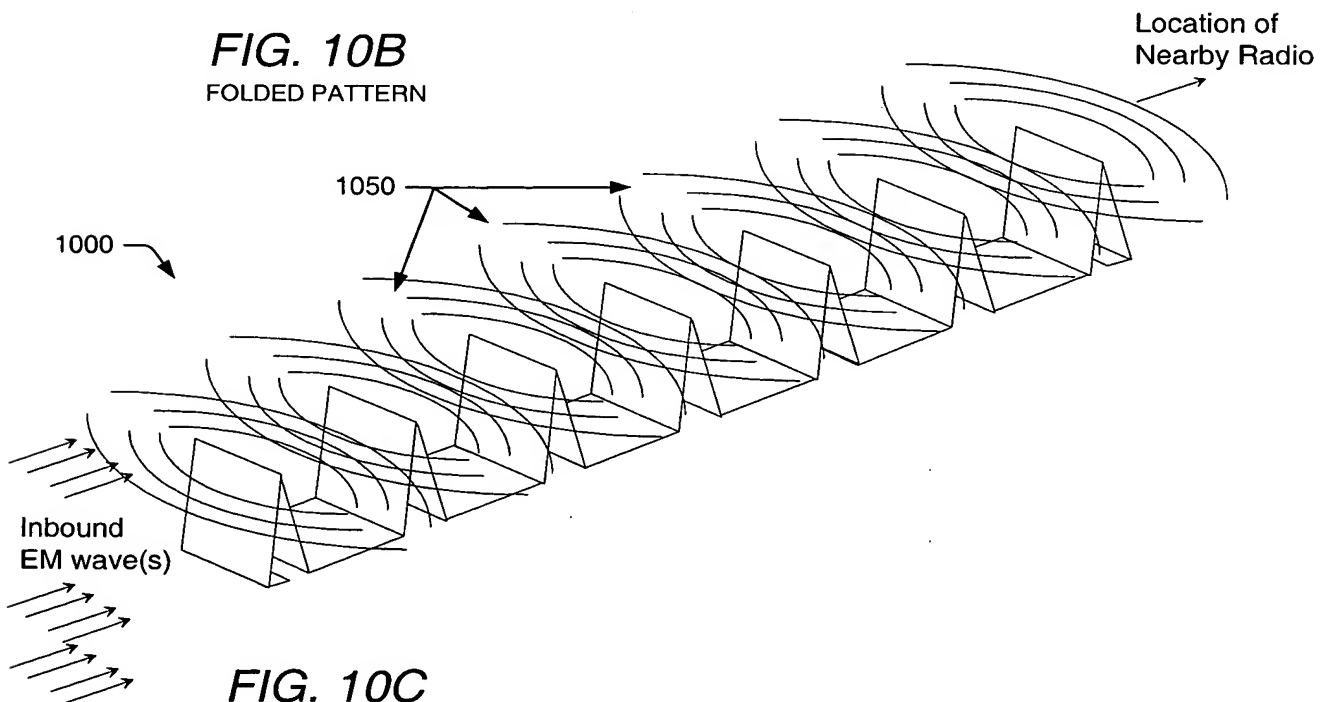


FIG. 10C

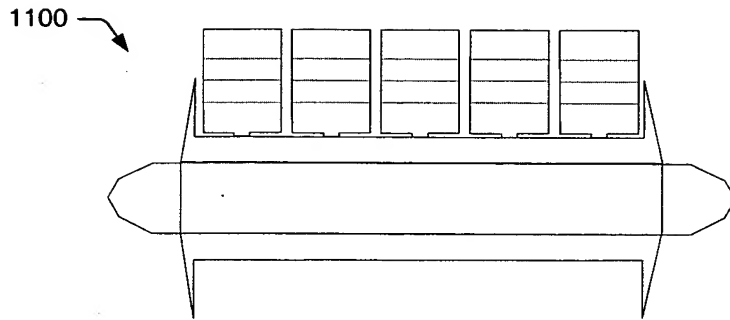


FIG. 11A
UNFOLDED PATTERN

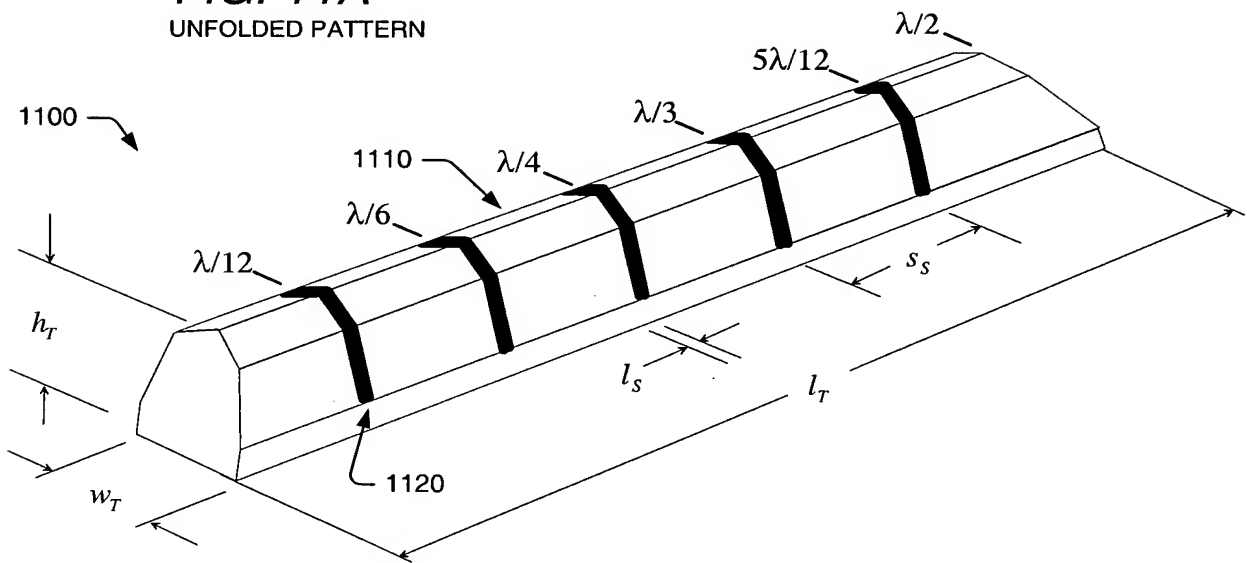


FIG. 11B
FOLDED PATTERN

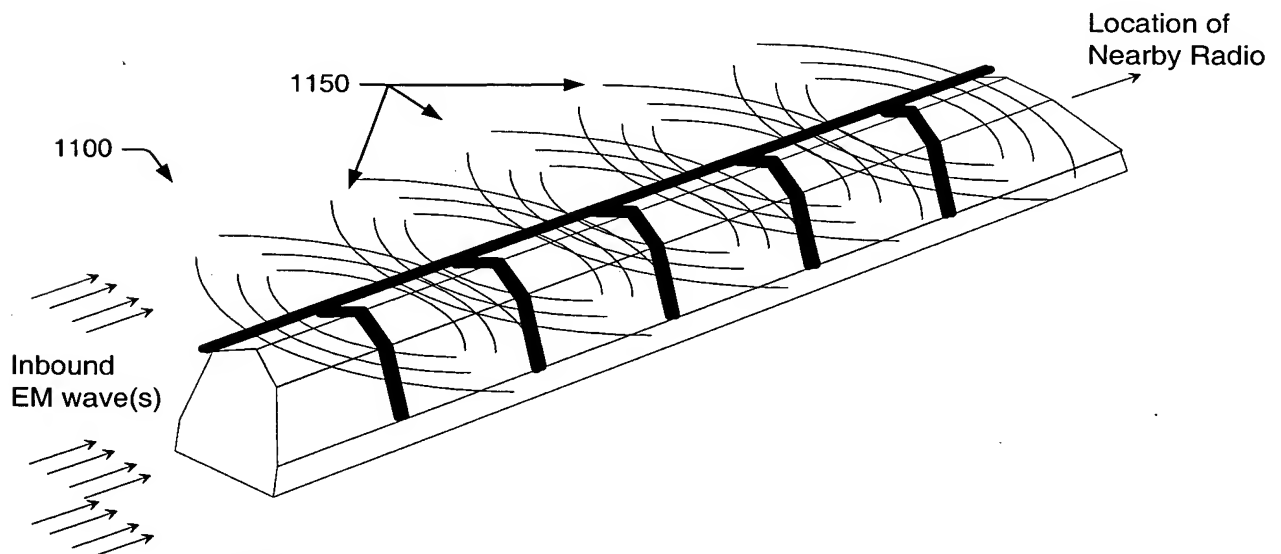


FIG. 11C

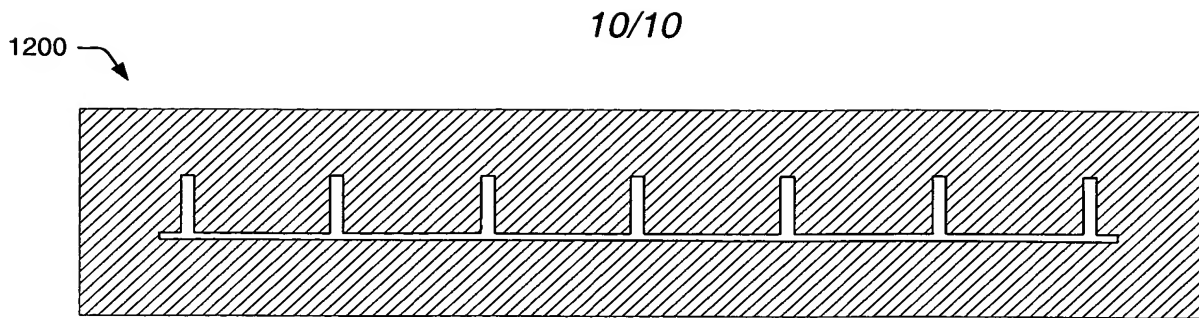


FIG. 12A

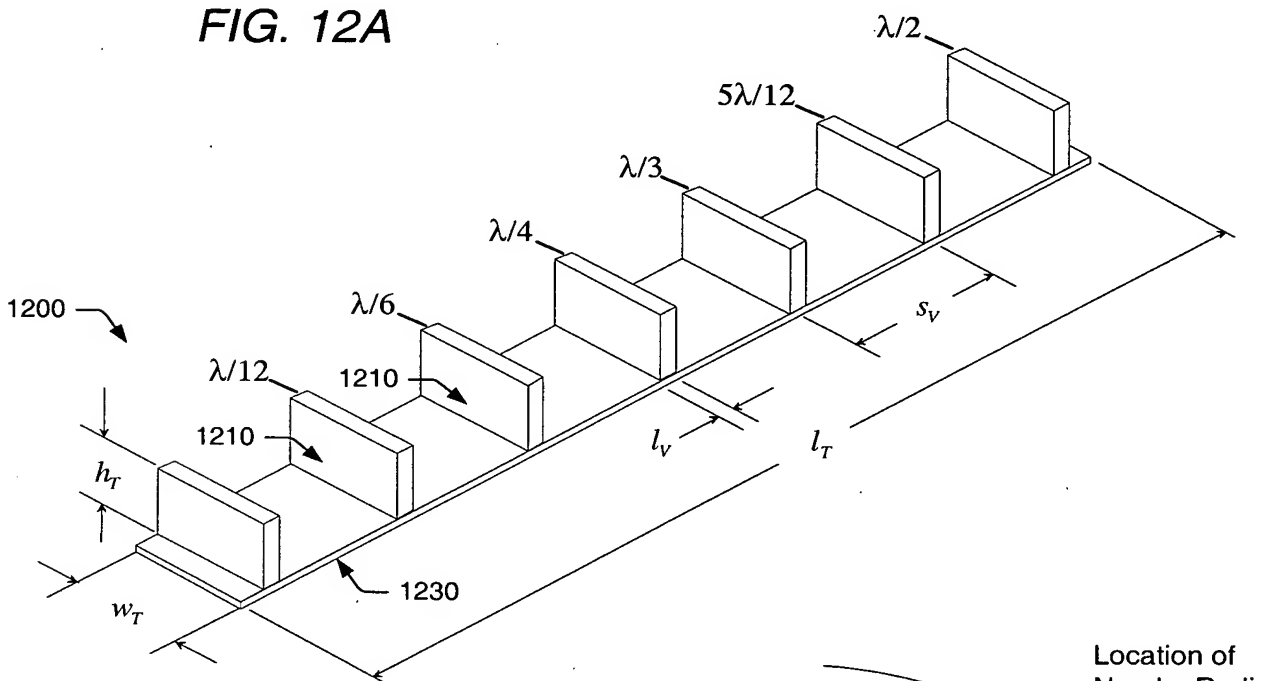


FIG. 12B

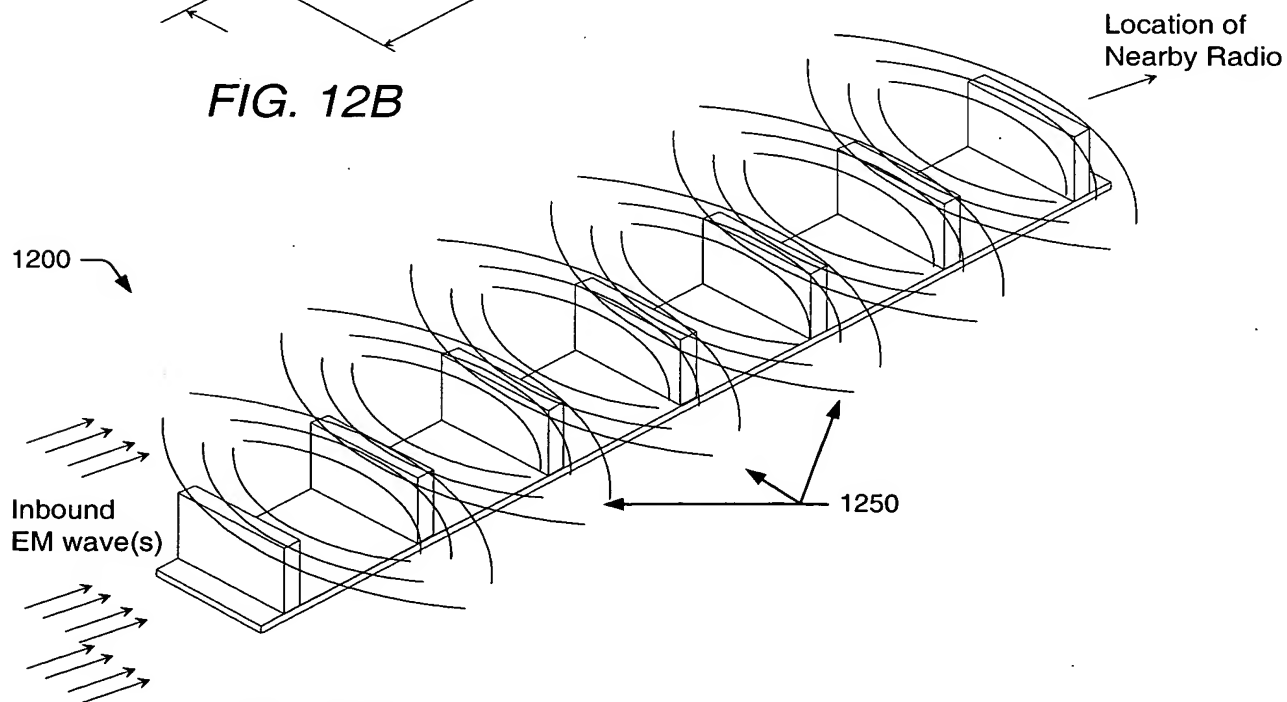


FIG. 12C